

REMARKS/ARGUMENTS

The above amendment, filed with an RCE, enters the limitation of Claims 7 and 9 into Claim 1 and limits the component (A) succinimide compound to a mono-based succinimide compound having an alkenyl group or an alkyl group of a number average molecular weight of 130 to 250 or a boronic compound thereof. Applicants have also filed herewith the Declaration of Yasunori Shimizu.

The final rejection over Tiffany did not include Claim 9. The final rejection over Morita did not include Claim 7. Thus, by incorporating the limitations of Claims 7 and 9 into Claim 1 Applicant has limited this case to the subject matter allowable over the previously applied references. Conforming amendments have been entered in Claims 11 and 12.

In the Advisory Action dated July 7, 2010, the Examiner took the position that even the new combination of limitations added to Claim 1 from Claims 7 and 9 may not overcome the prior rejections if a further reference was found relating to low sulfated ash in engine oils.

Applicants submit that the presently amended claims, combining the limitations of Claims 7 and 9 with Claim 1 and further limiting the component (A) succinimide compound to a mono-based succinimide compound having an alkenyl group or an alkyl group of a number average molecular weight of 130 to 250 or a boronic compound thereof, places this case in condition for allowance.

First, there is nothing in the presently applied references, even in combination, that would lead one of ordinary skill in the art to Applicant's presently claimed lubricating oil composition comprising a lubricating base oil, the component (A) mono-based succinimide compound, and the component (B) succinimide compound, this lubricating oil composition having a boron content of 100 ppm by mass or more and a sulfated ashes content of 0.8 % by mass or less. In fact, Morita specifically teaches in para. [0048] a preference for bis-type

succinimides, and nowhere suggests a combination of succinimide compounds having low and high molecular weight alkenyl groups, as claimed.

Second, Applicant has filed herewith the Declaration of Yasunori Shimizu in which Example 3 using a mono-type boronic compound of decenylsuccinimide as claimed is compared with a bis-type (preferred in Morita) boronic compound of decenylsuccinimide (Comparative Example A). As shown by the results in the Declaration:

Table A

		Comparative Experiment A	Example 3
Composition (mass %)	Base oil ¹⁾	88.5	93
	Component (A)		
	Succinimide A-1 ²⁾		
	Succinimide A-2 ³⁾		5
	Succinimide A-3 ³⁾	9.5	
	Component (B)		
	Polybutenyl succinimide B-1 ⁴⁾	2	2
	Polybutenyl succinimide B-2 ⁵⁾		
	Component (C)		
	Ashless antiwear agent ⁶⁾	0	0
Property & Performance	Kinematic Viscosity at 100°C mm ² /s	12.3	11.5
	Base Value KOHmg/g	5.2	5.3
	Boron Content ppm by mass	950	950
	Sulfated ashes % by mass	<0.1	<0.1
	Detergency: Hot Tube Test		
	Score	1	8
	Remained Base Value KOHmg/g	0.7	1.3
	Antiwear test: Complete contact load MPa	<0.049	0.069

the mono-type succinimide compounds as presently claimed are remarkably and unexpectedly superior when combined with the other components of the invention as compared with bis-type succinimides in both detergency and antiwear.

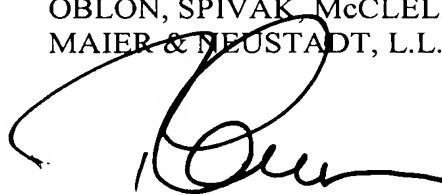
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Reply to Office Action of December 22, 2009

Accordingly, and in view of the above amendments to the claims, remarks, and the attached Declaration, Applicant respectfully submits that the present claims are free of the art and deserving of patent protection. An early Notice of Allowance is earnestly solicited.

Respectfully submitted,

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A handwritten signature in black ink, appearing to read 'R. Treanor', is written over a horizontal line.

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